James Ralph

Argonne National Laboratory 9700 South Cass Ave., Bldg. 205

Argonne, IL 60439

phone: 630/252-4519, fax: 630-252-4176

e-mail: ralph@cmt.anl.gov

Professional Experience

- Autothermal reforming catalyst development for reforming of gasoline and methane fuels focusing on sulfur tolerance
- Sulfur-tolerant anode material studies and test reactor design and construction
- Novel stack design studies (TuffCell) and test reactor design and construction for solid oxide fuel cell stack tests
- Single-cell studies and test reactor design and development for solid oxide fuel cell tests
- Low- and intermediate-temperature cathode development for solid oxide fuel cells using ceria- or zirconia-based electrolytes
- Development of improved ceramic electrolyte based on doped ceria for low-temperature solid oxide fuel cells

Professional Society Activities

- Institute of Materials, Minerals and Mining
- Electrochemical Society
- American Ceramic Society

Education

- PhD, DIC, Materials Science, Imperial College, University of London, UK
- BEng, ARSM, Materials Science and Engineering, Imperial College, University of London, UK